



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,233	07/31/2003	Lorenzo A. Ponce De Leon	CS22875JI023	1743
34952	7590	10/19/2004	EXAMINER	
FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI & BIANCO P.L. 551 N.W. 77TH STREET, SUITE 111 BOCA RATON, FL 33487			PHAN, THO GIA	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

K-18

<b>Office Action Summary</b>	<b>Application No.</b> 10/631,233	<b>Applicant(s)</b> PONCE DE LEON ET AL.	
	<b>Examiner</b> Tho G. Phan	<b>Art Unit</b> 2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/31/03</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-10, 12-15 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Egorov et al (6,326,921).

Egorov et al in figures 1-6 disclose an antenna comprising a parasitic element 350 positioned to be operatively coupled to the PIFA 310, and wherein RF energy is radiantly coupled between the parasitic element and the PIFA, wherein the parasitic element conforms to a surface 340 that is separated from the PIFA, and wherein the surface comprises at least a portion of a case of a wireless communications device (figure 6), at least two conductors 310,350 arranged so as to radiantly couple RF energy between the parasitic element and the PIFA antenna and at least one of a receiver (see claim 1 of Egorov et al) for wirelessly receiving transmitted signals and a transmitter for wirelessly transmitting signals.

Since all the claimed structures are shown by Egorov et al, the parasitic element is configured and positioned so as to further induce wireless operation of the PIFA within at least one additional frequency band would result.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Egorov et al in view of Kadambi et al (US 2003/0201943 A1).

Egorov et al have been discussed above but fail to teach wherein the parasitic element radiantly couples to at least three arms of the PIFA. However, Kadambi et al in figures 1-5 show the parasitic element radiantly couples to at least three arms 11a,11b,16,21,27 of the PIFA. It would have been obvious design choice to provide the parasitic element radiantly couples to at least three arms of the PIFA as taught by Kadambi et al for the purpose of improving the antenna gain.

5. Claims 3, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Egorov et al in view of Alameh et al (6,348,897).

Egorov et al have been discussed above but fail to teach the parasitic element has a shape that generally conforms to the shape of the PIFA. However, Alameh et al show the parasitic element has a shape that generally conforms to the shape of the PIFA (see figure 7). It would have been obvious design choice to provide the parasitic element has a shape that generally conforms to the shape of the PIFA as taught by Alameh et al for the purpose of improving the impedance matching. Furthermore, it would have been obvious to one skilled in the art to

Art Unit: 2821

employ different/same shapes, since such a modification would have involved a mere change in the shape or profile of a component. A change in shape or profile is generally recognized as being within the level of ordinary skill in the art.


***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Egorov, Tiao-Hsing et al and Kadambi et al are cited as of interested and illustrated a similar structure to an antenna radio communications device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho G. Phan whose telephone number is 571-272-1826. The examiner can normally be reached on (M-R), Monday-Thursday (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



The G. Phan  
Primary Examiner  
Art Unit 2821